



Creating climate-resilient and safe water supply systems across Ethiopia

STRENGTHENING CLIMATE RESILIENT SYSTEMS FOR WATER, SANITATION, AND HYGIENE SERVICES TECHNICAL ASSISTANCE PROJECT

2021 - 2025





The technical assistance project under the 'Strengthening Climate Resilient Systems in Water, Sanitation and Hygiene' programme (SCRS-WaSH TAP) was a holistic initiative geared towards Ethiopia's WaSH sector. Funded by the **Foreign, Commonwealth and Development Office** and implemented by **NIRAS** with **WaterAid**, SCRS-WaSH-TAP significantly improved systems at federal, regional and local levels to achieve sustainable, inclusive and climate-resilient WaSH service delivery. It:



Strengthened the management and operational systems of

30

climate-resilient rural multi-village water supply schemes that have substantially improved service delivery with increased revenue generation.



Fostered collaboration between agriculture and water offices to improve catchment protection and water security through climate-resilient water safety plans.



Developed Ethiopia's first Finance Strategy for the WaSH sector, a pioneering achievement that will guide future investments.



Established and supported

30

women-led MSEs supplying spare parts and maintenance services for WaSH facilities, enhancing service reliability.



Piloted innovative solutions to period poverty, benefiting

35,000 girls in

150 schools

Across Ethiopia's 12 regions and one city administration, SCRS-WaSH TAP empowered 30 rural multi-village schemes (MVS) to integrate climate resilience strategies in new and existing systems, all while promoting sustainable and equitable business models to ensure long-term impact. Beyond these achievements, the project also piloted private-sector innovations for menstrual hygiene management, promoting a gender-inclusive approach to rural WaSH.

SCRS-WaSH programme funding



Financial aid

£**80** million



Technical assistance

up to

£15 million

Key beneficiaries



- Rural multi-village schemes
- Local women- and youth-run micro & small enterprises
- 150 schools
- Regional Water and Energy Bureaus
- Ministry of Water and Energy
- Ministry of Finance
- Woreda Water and Energy Offices
- Woreda Job and Skills Offices
- Woreda Water and Agriculture Offices



Key objective

Transition 30 rural multi-village schemes (MVS) into sustainable business models.

Achievement

All 30 rural MVS utilities across Ethiopia that SCRS-WaSH TAP supported have resilient, self-sustaining service models.

- All 30 management systems of CR-WASH MVS utilities improved, with 21 MVS transitioning from a government management structure to a professionally managed, board-led autonomous institution
- Strengthened financial capacity of 20 MVS through tariff revisions and improved billing efficiency – as seen in the Awada Boricha MVS, which improved from a bill collection rate of 60% to 90%
- Revenue growth among 18 MVS utilities (accumulated revenue of 121,800,000 ETB or 711,790 GBP in six months) enabling them to cover operational expenses as seen in Negelle Arsi Utility, which doubled their revenue while reducing water losses and fully covering its expenses
- Increase in service delivery for an additional 67,292 people, with direct attribution estimated at 26,501 people
- 683 utility board members and staff received training on various topics, including utility management and customer service, with an emphasis on gender and youth social inclusion

Key objective

Enhance climate resilience in rural MVS utilities water management system.

Achievement

A total of 29 MVS utilities supported by SCRS-WaSH TAP developed and adopted Climate-Resilient Water Safety Plans (CR-WSPs).

- 252 government and utility personnel capacitated through training sessions and workshops, enhancing their knowledge and understanding of climate change, climate change adaptation approaches, the scope of CR-WSPs, all while equipping them with practical skills in risk assessment and planning as a result of collaborative on-site work
- 15 advocacy and microplanning workshops conducted, resulting in the signing of MOUs among 14 utilities and their respective woreda government sector partners, facilitating inter-sectoral coordination for CR-WSP implementation by mobilising in-kind labour from communities and tapping into resources from ongoing projects in target woredas.
- Construction of percolation trenches and half-moon terraces in a 214ha enclosed area in Ebo source catchment in Tigray, 31ha of hillside closure, terracing and plantation in Samte Source Catchment in Harari and 56ha of hillside terracing and plantation in Legeoda Source Catchment in Dire Dawa Administration
- Creation of service delivery models that can withstand climate change through post-construction capabilities using the six essential pillars (Figure 1)
- Other climate-resilient approaches and infrastructure: leakage detection and metering in non-revenue water; design and investment in resilient infrastructure; source catchment protection through flood control and rainwater infiltration



Key objective

Establish 30 women and youth-led Micro and Small Enterprises (MSEs) for spare parts supply and maintenance services.

Achievement

A total of 30 women- and youth-led MSEs were established for spare parts supply and maintenance services.

- A total of 23 MSEs fully operational amid security challenges in Amhara, Oromia and Benishangul-Gumuz
- 353 members trained (62% women, 5.6% persons with disabilities)
- Cumulative revenue of ETB 3.2 million, with a 131% increase in revenues showcasing promise of the MSE model in sustained growth over time.
- 85% of women-led MSE managers reported high leadership confidence
- Improved local spare parts availability and entrepreneurial opportunities

Key objective

Develop a National WaSH Financing Strategy for long-term sustainability

Achievement

Ethiopia's first National WaSH Finance Strategy, a pioneering document designed to address the sector's funding shortfall, was developed in collaboration with the Ministry of Water and Energy and Ministry of Finance

- Completed in August 2024 and officially delivered to the Ministry of Finance as a lead Ministry for the approval and implementation of the strategy in collaboration with the Ministry of Water and Energy
- Developed in collaboration with and with support and feedback from the Ministry of Finance, Ministry of Water and Energy and the National WaSH Financing Technical Working Group, ensuring that the strategy is technically sound and aligned with practical sector realities and needs
- The strategy is focused on domestic resource mobilization to address the WaSH sector's financing gap focused on:
 - Improved efficiencies and decreasing costs, such as reduced non-revenue water losses
 - Optimised funding by revising tariffs, improving billing and leveraging private sector investment
 - Enhanced credit with strengthened financial management and creditworthiness among water utilities
- Gender-responsive financial strategies were developed, ensuring inclusive access to WASH services

Key objective

Pilot innovative menstrual hygiene management (MHM) solutions in 150 schools

Achievement

An innovative private-sector supply of menstrual hygiene products was piloted in 150 Ethiopian schools while sustainably addressing the lack of affordable, high-quality options for 35,000 adolescent girls.

- Raised awareness among and trained 355 personnel (43.4% of whom were female) from regional, zonal and woreda education offices, as well as 150 School Directors and Gender Focal Teachers, with workshops and training covering topics such as puberty, barriers to menstrual hygiene management, gender and social norms, health impacts of poor menstrual hygiene, inclusion of girls with disabilities, the use of reusable sanitary pads, the 'Grow and Know' educational booklet
- 54,802 people including girls (33,289), boys (15,557), teachers (4,137), and community stakeholders (4,137) reached by Behavioural Change and Menstrual Hygiene Awareness training activities
- 7,029 educational booklets (one booklet for every five menstruating girls) produced in various languages – such as Afan Oromo, Afar, Agnuak, Amharic, Mejeng, Nuer, Sidama, Somali and Tigrigna – and distributed in schools (placed in libraries, Girls/WaSH/ Gender Clubs, and menstrual hygiene rooms), supporting menstrual hygiene-related behaviour change and communication activities
- Improved attendance & confidence among schoolgirls
- Distribution of reusable sanitary pads, underwear, and puberty educational booklets (printed in nine Ethiopian languages) following a strict procurement process
- Boys' participation helped break menstrual taboos



Key objective

Advance gender inclusion in WaSH governance.

Achievement

The project promoted gender equity in MVS utilities water governance structures.

- Improved gender inclusion in 80% of MVS utilities
- Increased female representation in water boards from 23% to 24.3%
- First female managers appointed in Jendeb and Sankura MVS utilities
- Gender-sensitive policies introduced in Benishangul Gumuz, Harari and Dire Dawa

Key objective

Perform monitoring, evaluation, knowledge management, and learning (cross-cutting themes) integral to the project.

Achievement

Evidence-based insights from TAP's activities are set to inform policy decisions in the future, as well as the next phase of the OWNP.

Six post-construction sustainability pillars



Policy and legal framework.

which involved strengthening existing WaSH policy and legal frameworks, enhancing governance structures, and ensuring compliance with regional directives.



Organization and strategy,

which dealt with developing business plans and implementing strengthening plans to bolster service delivery.



resource management,

which entailed developing staffing plans that prioritized the representation of women and marginalized groups in leadership roles, as well as continuous professional development

training.



Financial management,

which was a critical focus of TAP, aimed at improving the financial capabilities of the MVS utilities through training and onsite coaching



Technical operations.

which emphasized preventive maintenance, monitoring water production, asset management, climate-resilient Water Safety Plans, and managing losses to reduce non-revenue water.



Commercial operations.

which involved establishing customer databases and efficient billing systems while enhancing customer relations. It sought to create active customer forums and improve mechanisms for handling complaints.

Figure 1 – Six post-construction sustainability pillars



Stories of change

OBJECTIVE: Transition 30 rural multi-village schemes (MVS) into sustainable business models.

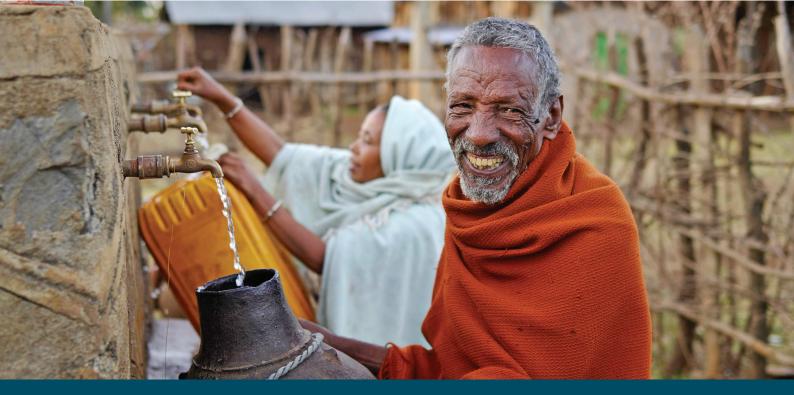
• A manager at Negelle Arsi Utility: "Before TAP, we struggled with outdated infrastructure, high non-revenue water (NRW) levels, and inefficient management. But with targeted training and essential equipment support, we strengthened our maintenance capacity, implemented a five-year business plan, and upgraded our billing system. As a result, we reduced NRW from 30% to 20.4%, saving 150,000 cubic meters of water in just six months, while our revenue jumped from 28 million Birr to 54 million Birr."



Stories of change

OBJECTIVE: Establish 30 women and youth led MSEs for spare parts and maintenance services.

• A manager at an MSE in Sankura District, Silte Zone, Central Ethiopia: "The project played a significant role in supporting us. It began by organizing us and providing 15 days of training. After completing the training, we participated in a 15-day apprenticeship program. Upon our return from the apprenticeship, the project supplied us with spare parts and maintenance equipment worth ETB 980,000. Additionally, the district administration rented a shop for us to sell the spare parts and covered the annual rent. When we started our work, the results were very promising. We are now sourcing spare parts from Addis Ababa independently and have even begun diversifying our supply. This has led to continued success."





Defining the scope, timeline, and key stakeholders



Assessing investment needs using lifecycle costing and fiscal space analysis to identify funding gaps



Formally adopting a strategy, with implementation support mechanisms in place

The five-phase approach of Ethiopia's national WaSH financing strategy



Conducting a comprehensive assessment of the WASH finance landscape, as well as examining expenditure trends, bottlenecks, and international best practices in domestic resource mobilization and private sector engagement



Formulating financing strategies focused on improving efficiency, expanding funding sources, and increasing repayable finance



Stories of change

OBJECTIVE: Enhance climate resilience in rural MVS utilities water management system.

- TAP produced site-specific designs for resilient infrastructure, including river crossings for main lines, watertight valve and meter chambers and drainage structures for flood-prone and inundated MVS in Oromia, Sidama, and Tigray. Some MVS – including Huruta-Hetossa-Dhera (Oromia) and Awada Boricha (Sidama) – have begun implementing these designs for river crossings and drainage.
- Both the Anko Golma and Chano Mile MVS's in South Ethiopia carried out tree plantations, specifically 250,000 seedlings at Anko Golma and 150,000 seedlings at Chano Mile, in enclosed areas covering a total of 160ha.

A few key lessons learned

- Enhancing cost recovery for rural schemes is essential.

 Appropriate tariff setting and efforts to reduce non-revenue water are critical, especially given the significant water losses in many drought-vulnerable schemes. Additionally, incorporating solarisation is vital, as many schemes rely on costly diesel generators. Harnessing solar power can reduce costs and improve reliability, with the added benefit of making schemes sustainable.
- Supporting stakeholders in understanding and planning for climate impacts, along with implementing costed CRWSPs, has proven effective. Collaborating with relevant line ministries to adopt planning elements and techniques for improved risk assessment, and integrate adaptive measures into plans and budgets, has significantly enhanced the process at the local level.
- Woreda administrations also play a pivotal role by facilitating working premises for these enterprises.
- Multi-stakeholder collaboration, international best practices, and integration with broader national programs may be key in enabling sustainable water and sanitation financing in the country.
- An inclusive financing strategy must take into account financial challenges faced by women, people with disabilities and vulnerable communities.
- Access to MHM resources inspires greater confidence among young girls in discussing menstruation and can address barriers in school attendance.



Stories of change

OBJECTIVE: Pilot innovative menstrual hygiene management (MHM) solutions in 150 schools.

- A female student from Homacho Waeno Primary School: "Before, I was afraid of coming to school because of my period, even if I used scrap cloth. I worried about what people would say. After the project, I'm not scared. Everyone received awareness and training. There is no more fear or shyness. I don't miss any class. I attend my lessons seriously and attentively."
- A gender focal teacher from Obora Primary **School:** "Thanks to TAP, girls now bring extra pads to change in the MHM room instead of missing lessons. Previously, if a girl was unwell, she would be sent home. Now, she comes to the MHM room first. If it's related to menstruation, she receives what she needs and continues her

In a nutshell

The SCRS-WaSH project significantly strengthened climate resilience in Ethiopia's WaSH sector through:

- Sustainable rural MVS utilities.
- Women and youth-led maintenanceand spare parts enterprises.
- A National Finance Strategy for long-term WaSH funding.
- Enhanced menstrual hygiene solutions in schools.
- Improved gender equity in water governance.









